

**Remarks**

Applicants thank the Examiner for examining the present application and finding that claim 8 contains allowable subject matter. With entry of this amendment, claims 1-31 are pending.

By this Amendment, new claim 31 is submitted for consideration. Support for new claim 31 can be found in the specification at, for example, page 5, lines 1-5. No new matter is introduced.

**Claims 1-8**

**Sheen Does Not Teach Each and Every Element of Independent Claim 1**

The Examiner rejects independent claim 1 as being anticipated under 35 U.S.C. § 102(b) by U.S. Patent No. 5,859,609 (“*Sheen*”). (Office action at pages 2-3.) The Examiner’s rejection is traversed. A proper anticipation rejection requires that a “reference . . . teach every element of the claim.” (*See* MPEP 2131.) As discussed below, *Sheen* fails to teach all the features of claim 1, and claim 1 is properly allowable over *Sheen*.

Claim 1 recites a method comprising, in part:

establishing data corresponding to intensity of the returned electromagnetic radiation along the surface and depth along the surface; and  
adaptively processing the data to determine if a man-made object suspected to be one or more of contraband or a potential security threat is being carried by the person as a function of the intensity along the surface and the depth along the surface.

*Sheen* does not teach or suggest such a method. In general, *Sheen* describes a method and apparatus for forming a cylindrical image with millimeter wavelength signals. (*Sheen*, col. 1, lines 21-28.) The algorithm for reconstructing an image from data received by the *Sheen* transceiver is described at column 8, lines 1-61. From the described algorithm, it can be seen that the sampled data  $s(\theta, \omega, z)$ , which corresponds to the response measured at the transceiver position (*Sheen*, col. 8, lines 1-8 and Certificate of Correction), is the only data processed to render a desired image. By contrast, claim 1 recites “establishing data corresponding to intensity of the returned electromagnetic radiation along the surface and depth along the surface” and

“adaptively processing the data to determine if a man-made object . . . is being carried by the person as a function of the intensity along the surface and the depth along the surface.”

The algorithm described at column 8, lines 1-61 of *Sheen* is used to produce an image based on the sampled data  $s(\theta, \omega, z)$  and does not change over time or in response to other factors. The algorithm is therefore static or non-adaptive. By contrast, claim 1 recites “adaptively processing” the data to determine if a man-made object suspected to be one or more of contraband or a potential security threat is being carried by the person.

In the Office action, the Examiner suggests that FIGS. 10-11 and column 2, lines 47-51, of *Sheen* teach the method acts of “establishing . . . data corresponding to depth along the surface” and “adaptively processing the data . . . to determine if a man-made object . . . is being carried by the person as a function of the intensity along the surface and the depth along the surface.” (Office action at pages 2-3.) Applicants disagree. FIG. 10 is a photograph of a subject and FIG. 11 is an image of the subject of FIG. 10 made from an exemplary cylindrical scan as described in *Sheen*. The image of FIG. 11 is the result of the disclosed reconstruction algorithm at column 8, lines 1-61, however, and does not teach or suggest any adaptive processing.

Furthermore, the portion of *Sheen* at column 2, lines 47-51 merely recites that an object of the *Sheen* invention is to “accomplish near real-time imaging” and to “have an expanded depth of field.” The term “depth of field,” however, refers to the range of distances in front of the antenna array in which the object appears in focus and “real-time imaging” refers to a rate at which images can be produced. Neither pertains to adaptive processing as recited in claim 1. Accordingly, the section of *Sheen* relied on by the Examiner does not teach or suggest “adaptively processing” the data as recited in claim 1.

For at least these reasons, *Sheen* does not implicitly or expressly teach each and every element of independent claim 1 as required by 35 U.S.C. § 102(b). Accordingly, the Examiner’s § 102(b) rejection of claim 1 should be withdrawn and such action is respectfully requested.

**The Combination of *Sheen* and *Volkov* Does Not Teach All the Elements of Independent Claim 1**

The Examiner also rejects independent claim 1 as being obvious under 35 U.S.C. § 103(a) over *Sheen* in view of U.S. Patent No. 6,777,684 (“*Volkov*”). The Examiner’s rejection is traversed.

As explained above, *Sheen* does not implicitly or expressly teach “establishing data corresponding to intensity of the returned electromagnetic radiation along the surface and depth along the surface” and “adaptively processing the data to determine if a man-made object . . . is being carried by the person as a function of the intensity along the surface and the depth along the surface” as recited in claim 1. *Volkov* also does not implicitly or expressly teach these elements of claim 1.

*Volkov* generally concerns a system and method for millimeter and sub-millimeter wavelength imaging. (*Volkov*, col. 1, lines 10-12.) In the section relied on by the Examiner, *Volkov* describes a technique for minimizing speckle in the imaging of an object by using statistically independent partial images, wherein the partial images are created “using radiation containing at least two substantially different spectral regions.” (*Volkov*, col. 9, lines 56-67; col. 10, lines 1-60.) The curves 54, 56, and 58 in respective FIGS. 3a-3c, for example, show partial images obtained at distinct frequencies, and image 53 shows the combination of the partial images. (*Volkov*, col. 10, lines 13-18.) These cited portions of *Volkov* fail to teach or suggest “adaptively processing” data as recited in claim 1.

Accordingly, because all the features of claim 1 are not taught or suggested by the *Sheen/Volkov* combination, the Examiner’s § 103(a) rejection of independent claim 1 should be withdrawn and such action is respectfully requested. (See MPEP 2143.04: “To establish *prima facie* obviousness of a claimed invention, all the claimed limitations must be taught or suggested by the prior art.”)

**Dependent Claims 2-7 Are Also Allowable**

The Examiner rejects dependent claims 2 and 4-7 as being either anticipated by *Sheen* or obvious over *Sheen* in view of *Volkov*. (Office action at pgs. 2-3.) The Examiner also rejects claim 3 as being obvious over *Sheen* in view of *Volkov* in further view of U.S. Patent Application Publication No. 20020150304 (“*Ockman*”). The Examiner’s rejections are all traversed.

Claims 2-7 are dependent on independent claim 1 and are allowable for at least the reasons stated above with respect to claim 1. Further, claims 2-7 are each independently patentable because of the unique and nonobvious features of the combinations set forth in each claim.

### **Claims 9-16**

At the outset, it is noted that with respect to independent claim 9, the Examiner does not recite the claim, and thus does not expressly identify the portions of the applied references believed to teach the elements of claim 9 as required by 37 C.F.R. § 1.104(c)(2). Accordingly, the Office action is not believed to be a proper action on the merits, and any subsequent action should not be final. (*See* MPEP 706.07(a).) Applicants will nonetheless respond to the Examiner's concerns as best as possible.

#### ***Sheen Does Not Teach Each and Every Element of Independent Claim 9***

The Examiner rejects independent claim 9 as being anticipated under 35 U.S.C. § 102(b) by U.S. Patent No. 5,859,609 (“*Sheen*”). (Office action at pages 2-3.) The Examiner’s rejection is traversed.

Independent claim 9 recites a method comprising:

irradiating an interrogation region including a person carrying a concealed object;  
detecting electromagnetic radiation returned from the interrogation region in response to said irradiating, the electromagnetic radiation including one or more frequencies in a range of about 200 MHz to about 1 THz;  
establishing data representative of a map of intensity of the electromagnetic radiation returned from the interrogation region and a map of depth along the interrogation region; and  
inputting the data into a neural network to determine if the concealed object is at least one of contraband or a weapon based on the map of intensity and the map of depth.

By contrast, *Sheen* teaches a processing algorithm that uses only the sampled data  $s(\theta, \omega, z)$ , which corresponds to the response measured at the transceiver portion, to render the desired image. (*Sheen*, col. 8, lines 1-61.) Thus, *Sheen* does not teach or suggest at least “establishing data representative of a map of intensity of the electromagnetic radiation returned from the interrogation region and a map of depth along the interrogation region” as in claim 9.

Furthermore, the Examiner admits and Applicants agree that “*Sheen* is silent about using neural network processing.” (Office action at pg. 5.)

Finally, the portion of *Sheen* apparently relied on by the Examiner merely states that an object of the *Sheen* invention is to “have an expanded depth of field.” (*Sheen*, col. 2, lines 47-51.) The “depth of field” referred to concerns the range of distances in front of the antenna array in which the object appears in focus, not the character of the data input into the neural network.

Accordingly, *Sheen* does not implicitly or expressly teach at least the elements of “establishing data representative of a map of intensity of the electromagnetic radiation returned from the interrogation region and a map of depth along the interrogation region” or “inputting the data into a neural network to determine if the concealed object is at least one of contraband or a weapon based on the map of intensity and the map of depth” as in claim 9.

Because *Sheen* does not implicitly or expressly teach each and every element of independent claim 9, the Examiner’s § 102(b) rejection of claim 9 should be withdrawn and such action is respectfully requested. (See MPEP 2131 (“To anticipate a claim, the reference must teach every element of the claim.”).)

**The Combination of *Sheen* and *Volkov* Does Not Teach All the Elements of Independent Claim 9**

The Examiner also rejects independent claim 9 as being obvious under 35 U.S.C. § 103(a) over *Sheen* in view *Volkov*. (Office action at pgs. 2-3.) The Examiner’s rejection is traversed.

As explained in the preceding section, *Sheen* does not implicitly or expressly teach the elements of “establishing data representative of a map of intensity of the electromagnetic radiation returned from the interrogation region and a map of depth along the interrogation region” and “inputting the data into a neural network to determine if the concealed object is at least one of contraband or a weapon based on the map of intensity and the map of depth” as in claim 9.

Moreover, and as discussed above with respect to claim 1, the section of *Volkov* relied on by the Examiner describes a technique for minimizing speckle in the imaging of an object by using statistically independent partial images. (*Volkov*, col. 9, lines 56-67; col. 10, lines 1-60.) The partial images described and shown in *Volkov* correspond to intensity distributions of the

received radiation and do not concern “a map of depth along the interrogation region” as in independent claim 9. As discussed in the specification of the present application at page 20, lines 5-23; page 21, lines 1-2; page 24, lines 8-23; and page 25, lines 1-6, for example, a map of intensity from the interrogation region is different than a map of depth along the interrogation region. In describing one exemplary embodiment, for instance, the specification of the present application notes: “Routine 170a generates two different two-dimensional image data maps . . . . These are: (a) a two-dimensional map derived from the topographical representation based on maximum pixel intensity (an intensity map); and (b) a two-dimensional map based on relative depth of the reflecting surface as determined from range information (a depth map).” (Specification at page 20, lines 14-21.) Thus, *Volkov* does not teach or suggest at least “establishing data representative of a map of intensity of the electromagnetic radiation returned from the interrogation region and a map of depth along the interrogation region” as in claim 9.

Furthermore, the section of *Volkov* apparently relied on by the Examiner is silent with respect to how image processing is done. Accordingly, *Volkov* does not teach or suggest “inputting the data into a neural network” as in claim 9.

Moreover, the only reference to “depth” in the section of *Volkov* apparently relied on by the Examiner is in the description of the object being imaged in FIGS. 4a-4d. (*Volkov*, col. 10, lines 52-57.) This reference refers to the shape of the object itself, however, and not the character of the data input into a neural network.

Accordingly, *Volkov* does not teach or suggest at least the elements of “establishing data representative of a map of intensity of the electromagnetic radiation returned from the interrogation region and a map of depth along the interrogation region” or “inputting the data into a neural network to determine if the concealed object is at least one of contraband or a weapon based on the map of intensity and the map of depth” as in claim 9.

Because all claim limitations are not taught or suggested by *Sheen* in combination with *Volkov*, the Examiner’s § 103(a) rejection of independent claim 9 should be withdrawn and such action is respectfully requested. (See MPEP 2143.04: “To establish *prima facie* obviousness of a claimed invention, all the claimed limitations must be taught or suggested by the prior art.”)

### **Dependent Claims 10-16 Are Also Allowable**

The Examiner rejects claims 10-12 as being obvious over *Sheen* in view of *Volkov* in further view of *Ockman* in further view of U.S. Patent No. 6,359,582 (“*MacAleese*”). (Office action at pgs. 5-6.) The Examiner also rejects claims 13-16 as being either anticipated by *Sheen* or obvious over *Sheen* in view of *Volkov*. (Office action at pgs. 2-3.) The Examiner’s rejections are all traversed.

Claims 10-16 are dependent on independent claim 9 and are allowable for at least the reasons stated above with respect to claim 9. Further, claims 10-16 are each independently patentable because of the unique and nonobvious features of the combinations set forth in each claim.

### **Claims 25-30**

At the outset, it is noted that with respect to independent claim 25, the Examiner does not recite the claim, and thus does not expressly identify the portions of the applied references believed to teach the elements of claim 25 as required by 37 C.F.R. § 1.104(c)(2). Accordingly, the Office action is not believed to be a proper action on the merits, and any subsequent action should not be final. (*See* MPEP 706.07(a).) Applicants will nonetheless respond to the Examiner’s concerns as best as possible.

### ***Sheen* Does Not Teach Each and Every Element of Independent Claim 25**

The Examiner rejects independent claim 25 as being anticipated under 35 U.S.C. § 102(b) by U.S. Patent No. 5,859,609 (“*Sheen*”). (Office action at pages 2-3.) The Examiner’s rejection is traversed.

Independent claim 25 recites an apparatus comprising:

a device carrying logic executable by one or more processors to analyze data corresponding to an image of a person obtained from electromagnetic radiation including one or more frequencies in a range of about 200 MHz to about 1 THz, the data being representative of a map of electromagnetic radiation intensity and a map of depth determined relative to the person, the logic being further operable to execute an adaptive process with the data to evaluate if one or more objects suspected of being at least one of contraband or a potential security threat are being concealed by the person as a function of the map of electromagnetic radiation intensity and the map of depth and provide an output indicating the detection of the one or more objects if indicated by the adaptive process.

By contrast, and as discussed above with respect to claim 1, *Sheen* teaches a processing algorithm that uses only the sampled data  $s(\theta, \omega, z)$ , which corresponds to the response measured at the transceiver portion, to render the desired image. (*Sheen*, col. 8, lines 1-60.) Thus, *Sheen* does not teach or suggest at least “a device carrying logic . . . to analyze data corresponding to an image of a person . . . , the data being representative of a map of electromagnetic radiation intensity and a map of depth determined relative to the person” as in claim 25.

Furthermore, the algorithm described at col. 8, lines 1-61 of *Sheen* does not change over time or in response to other factors. The algorithm is therefore static or non-adaptive. Thus, *Sheen* does not teach or suggest “logic being further operable to execute an adaptive process with the data to evaluate if one or more objects suspected of being at least one of contraband or a potential security threat are being concealed by the person as a function of the map of electromagnetic radiation intensity and the map of depth” as in claim 25.

Finally, the portion of *Sheen* apparently relied on by the Examiner merely states that an object of the *Sheen* invention is to “have an expanded depth of field.” (*Sheen*, col. 2, lines 47-51.) The “depth of field” referred to concerns the range of distances in front of the antenna array in which the object appears in focus, not the character of the data processed.

Accordingly, *Sheen* does not implicitly or expressly teach at least “a device carrying logic . . . to analyze data corresponding to an image of a person . . . , the data being representative of a map of electromagnetic radiation intensity and a map of depth determined relative to the person” or “logic being further operable to execute an adaptive process with the data to evaluate if one or more objects suspected of being at least one of contraband or a potential security threat are being concealed by the person as a function of the map of electromagnetic radiation intensity and the map of depth” as in claim 25.

Because *Sheen* does not implicitly or expressly teach each and every element of independent claim 25, the Examiner’s § 102(b) rejection of claim 25 should be withdrawn and such action is respectfully requested. (See MPEP 2131 (“To anticipate a claim, the reference must teach every element of the claim.”).)

**The Combination of *Sheen* and *Volkov* Does Not Teach All the Elements of Independent Claim 25**

The Examiner also rejects independent claim 25 as being obvious under 35 U.S.C. § 103(a) over *Sheen* in view *Volkov*. (Office action at pgs. 2-3.) The Examiner's rejection is traversed.

As explained in the preceding section, *Sheen* does not implicitly or expressly teach the elements of "a device carrying logic . . . to analyze data corresponding to an image of a person . . . , the data being representative of a map of electromagnetic radiation intensity and a map of depth determined relative to the person" or "logic being further operable to execute an adaptive process with the data to evaluate if one or more objects suspected of being at least one of contraband or a potential security threat are being concealed by the person as a function of the map of electromagnetic radiation intensity and the map of depth" as in claim 25.

Moreover, the section of *Volkov* relied on by the Examiner describes a technique for minimizing speckle in the imaging of an object by using statistically independent partial images. (*Volkov*, col. 9, lines 56-67; col. 10, lines 1-60.) The partial images described and shown in *Volkov* correspond to intensity distributions of the received radiation and do not concern "a map of depth determined relative to the person" as in independent claim 25. Furthermore, a map of electromagnetic radiation intensity is different than a map of depth determined relative to the person. (See, e.g., Specification at page 20, lines 14-21; page 25, lines 1-6.) Thus, *Volkov* does not teach or suggest at least "a device carrying logic . . . to analyze data corresponding to an image of a person . . . , the data being representative of a map of electromagnetic radiation intensity and a map of depth determined relative to the person" as in claim 25.

Furthermore, the section of *Volkov* apparently relied on by the Examiner is silent with respect to how image processing is done. Accordingly, *Volkov* does not teach or suggest "logic being further operable to execute an adaptive process with the data to evaluate if one or more objects suspected of being at least one of contraband or a potential security threat are being concealed by the person as a function of the map of electromagnetic radiation intensity and the map of depth" as in claim 25.

Furthermore, the only reference to "depth" in the section of *Volkov* apparently relied on by the Examiner is in the description of the object being imaged in FIGS. 4a-4d. (*Volkov*, col.

10, lines 52-57.) This reference refers to the shape of the object itself, however, and not the character of the data being analyzed.

Accordingly, *Volkov* also does not teach or suggest at least “a device carrying logic . . . to analyze data corresponding to an image of a person . . . , the data being representative of a map of electromagnetic radiation intensity and a map of depth determined relative to the person” or “logic being further operable to execute an adaptive process with the data to evaluate if one or more objects suspected of being at least one of contraband or a potential security threat are being concealed by the person as a function of the map of electromagnetic radiation intensity and the map of depth” as in independent claim 25.

Because all claim limitations are not taught or suggested by *Sheen* in combination with *Volkov*, the Examiner’s § 103(a) rejection of independent claim 25 should be withdrawn and such action is respectfully requested. (*See MPEP 2143.04: “To establish *prima facie* obviousness of a claimed invention, all the claimed limitations must be taught or suggested by the prior art.”*)

### **Dependent Claims 26-30 Are Also Allowable**

The Examiner rejects claims 26-28 as being either anticipated by *Sheen* or obvious over *Sheen* in view of *Volkov*. (Office action at pgs. 2-3.) The Examiner also rejects claims 29-30 as being obvious over *Sheen* in view of *Volkov* in further view of *Ockman* in further view *MacAleese*. (Office action at pgs. 5-6.) The Examiner’s rejections are all traversed.

Claims 26-30 are dependent on independent claim 25 and are allowable for at least the reasons stated above with respect to claim 25. Further, claims 26-30 are each independently patentable because of the unique and nonobvious features of the combinations set forth in each claim.

### **Claims 17-24**

At the outset, it is noted that with respect to independent claim 17, the Examiner does not recite the claim in the Office action, and thus does not expressly identify the portions of the applied references believed to teach the elements of claim 17 as required by 37 C.F.R. § 1.104(c)(2). Instead, the Examiner recites claim 11 and appears to equate claim 17 with claim 11. Claim 17, however, recites different features than claim 11 and has a different scope.

Without more, Applicants cannot determine the basis of the Examiner's rejection. Accordingly, the Office action is not believed to be a proper action on the merits and any subsequent action should not be final. (*See* MPEP 706.07(a).) Applicants will nonetheless respond to the Examiner's concerns as best as possible.

**The Combination of *Sheen*, *Volkov*, *Ockman*, and *MacAleese* Does Not Teach All the Elements of Independent Claim 17**

The Examiner rejects claim 17 under 35 U.S.C. § 103(a) as being obvious over *Sheen* in view of *Volkov* in further view of *Ockman* in further view of *MacAleese*. (Office action at pgs. 5-6.) The Examiner's rejection is traversed.

Claim 17 recites a system comprising:

an array operable to interrogate a person with electromagnetic radiation at one or more frequencies in a range of about 200 MHz to about 1 THz; and

a processing subsystem coupled to the array, the processing subsystem being operable to provide a neural network including a first set of inputs and a second set of inputs, the first set of inputs being arranged to receive data corresponding to a map of returned electromagnetic radiation intensity along a surface beneath clothing of the person, the second set of inputs being arranged to receive other data corresponding to a map of depth along the surface, the neural network being effective to evaluate if one or more objects suspected of being at least one of contraband or a potential security threat as a function of the map of intensity and the map of depth are concealed by the person and provide one or more corresponding outputs.

By contrast, and as discussed above with respect to claim 1, *Sheen* teaches a processing algorithm that uses only the sampled data  $s(\theta, \omega, z)$ , which corresponds to the response measured at the transceiver portion, to render the desired image. (*Sheen*, col. 8, lines 1-61.) Thus, *Sheen* does not teach or suggest at least "a neural network including . . . [a] first set of inputs being arranged to receive data corresponding to a map of returned electromagnetic radiation intensity along a surface beneath clothing of the person, [and a] second set of inputs being arranged to receive other data corresponding to a map of depth along the surface" or a "neural network [] effective to evaluate if one or more objects suspected of being at least one of contraband or a potential security threat as a function of the map of intensity and the map of depth are concealed by the person" as in claim 17.

Moreover, and as discussed above, the section of *Volkov* apparently relied on by the Examiner is understood to describe and show intensity distributions of the received radiation.

(*Volkov*, col. 9, lines 56-67; col. 10, lines 1-60.) Thus, *Volkov* does not teach or suggest at least “a neural network including . . . [a] first set of inputs being arranged to receive data corresponding to a map of returned electromagnetic radiation intensity along a surface beneath clothing of the person, [and a] second set of inputs being arranged to receive other data corresponding to a map of depth along the surface” or a “neural network [] effective to evaluate if one or more objects suspected of being at least one of contraband or a potential security threat as a function of the map of intensity and the map of depth are concealed by the person” as in claim 17.

*Ockman* describes a system for fusing two or more images from different sensors into one image. (*Ockman*, para. 2.) *Ockman*, however, is nowhere understood to teach or suggest “a neural network including . . . [a] first set of inputs being arranged to receive data corresponding to a map of returned electromagnetic radiation intensity along a surface beneath clothing of the person, [and a] second set of inputs being arranged to receive other data corresponding to a map of depth along the surface” or a “neural network [] effective to evaluate if one or more objects suspected of being at least one of contraband or a potential security threat as a function of the map of intensity and the map of depth are concealed by the person” as in claim 17.

*MacAleese* describes a system for remotely detecting concealed weapons using radar. (*MacAleese*, col. 1 lines 15-16; col. 1, lines 48-54.) The system described in *MacAleese* uses one or both of two possible methods for detection of a concealed weapon. The first method utilizes the specular backscatter from firearms, and the second method utilizes the self-resonant scattering from the metal parts of the firearm. (*MacAleese*, col. 7, lines 19-25.) Nowhere, however, is *MacAleese* understood to teach or suggest “a neural network including . . . [a] first set of inputs being arranged to receive data corresponding to a map of returned electromagnetic radiation intensity along a surface beneath clothing of the person, [and a] second set of inputs being arranged to receive other data corresponding to a map of depth along the surface” or a “neural network [] effective to evaluate if one or more objects suspected of being at least one of contraband or a potential security threat as a function of the map of intensity and the map of depth are concealed by the person” as in claim 17.

Because all claim limitations are not taught or suggested by *Sheen* in view of *Volkov* in further view *Ockman* in further view of *MacAleese*, the Examiner’s § 103(a) rejection of independent claim 17 should be withdrawn and such action is respectfully requested. (See

MPEP 2143.04: “To establish *prima facie* obviousness of a claimed invention, all the claimed limitations must be taught or suggested by the prior art.”)

Furthermore, in the rejection of claim 17, the Examiner has not identified any motivation or suggestion to combine the teachings of *Sheen* with *Volkov* or *Ockman*. For this additional reason, the Examiner’s § 103(a) rejection of independent claim 17 should be withdrawn. (See MPEP 2143: “To establish a *prima facie* case of obviousness . . . there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.”)

### **Dependent Claims 18-24 Are Also Allowable**

The Examiner rejects claims 18-21, 23, and 24 as being obvious over *Sheen* in view of *Volkov* in further view of *Ockman* in further view of *MacAleese*. (Office action at pgs. 5-6.) The Examiner also rejects claim 22 as being obvious over *Sheen* in view of *Volkov* in further view of *Ockman* in further view of *MacAleese* in further view of U.S. Patent No. 6,057,761 (“*Yukl*”). The Examiner’s rejections are all traversed.

Claims 18-24 are dependent on independent claim 17 and are allowable for at least the reasons stated above with respect to claim 17. Further, claims 18-24 are each independently patentable because of the unique and nonobvious features of the combinations set forth in each claim.

### **New claim 31**

New claim 31 recites a method comprising “establishing at least one of a first data set corresponding to intensity of returned electromagnetic radiation from an object along a surface of the object and a second data set corresponding to depth along the surface” and “adaptively processing at least one of the first data set and the second data set to identify a man-made object suspected to be one or more of contraband or a potential security threat.”

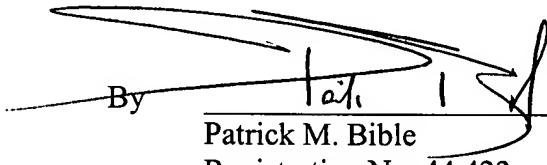
None of the applied references, either alone or in combination with one another, teach all of the elements of claim 31. Accordingly, new claim 31 is believed to be in condition for allowance and such action is respectfully requested.

Conclusion

For the reasons recited above, the application is believed to be in condition for allowance and such action is respectfully requested. Should any further issues remain concerning this application, the Examiner is invited to call the undersigned attorney to discuss such matters.

Respectfully submitted,

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